

A Woodcut for the Ages

— Howard L. Cohen

A popular astronomical wood engraving depicting a mortal peering beyond where the heavens and earth meet appears medieval in nature. However, it is not as ancient as often perceived but was created by a well-known French astronomer and author in the late nineteenth century

AAC members and guests who were privileged to hear Dr. Fred Gregory's interesting talk on "Extraterrestrial Life Over the Ages" at our 2007 April meeting saw a slide showing a popular astronomical woodcut engraving that appears to date back many centuries. AAC board member, Pam Mydock, asked about the engraving but Dr. Gregory was not familiar with its origin. The woodcut was very familiar to me but I could not remember much about its history except I believed it was not very ancient as many think. In fact, I also remembered reading about the woodcut many years ago in *Sky & Telescope* but could not recall when.

Shortly afterwards, Pam e-mailed me about the woodcut. She had done some investigative work on the Internet and, indeed, found the engraving was apparently not very old. However, she was unsure about the accuracy of the material she found.

This encouraged me to look up the old *Sky & Telescope* article (May 1977, p. 356). Fortunately, my library contains over fifty years of this old, reputable and wonderful astronomical publication and I was able to find what I was looking for.

This important article about the origin of the woodcut appeared in a popular *Sky & Telescope* column called *Astronomical Scrapbook* and titled, "About An Astronomical Woodcut." Joseph Ashbrook (1918–1980), who authored the column, was first a technical editor of *Sky & Telescope* (1956) and then editor from 1964 until 1980 when he regrettably passed way at age 62. Ashbrook had helped establish galactic distances based on studies of Cepheid variables, was meticulous at data reduction and had used century old archives to determine a highly precise value for the Martian rotation period. He was passionate about amateur astronomy, variable stars and was a longtime member of the AAVSO (American Association of Variable Star Observers). Ashbrook was co-discover of Comet 47P/Ashbrook-Jackson. In addition, asteroid 2157 Ashbrook and lunar crater Ashbrook both carry his name. For our purposes, he also had a knack for transforming the most minute details of astronomical history into fascinating and reliable tales. Hence, most of the material for this article results from Ashbrook's wonderful efforts and talent for researching and recording astronomical history.

Many who write about the woodcut are quick to point out its apparent recent roots with some even pointing out that NASA seems to have discovered its relatively recent origin though the space agency wrongly attributed the engraving to early twentieth century. But, few mention that it was Ashbrook who first helped publicize the mystery of the woodcut and its origins.

For those not especially familiar with this astronomical woodcut (Figure 1), this engraving illustrates an elaborate landscape of houses and vegetation. A stately tree extends

upwards toward the heavens filled with Sun, Moon and stars. A seemingly medieval figure appears at the lower left, dressed in a cloak and hat. His head and the top of a pilgrim's staff held by his left hand protrude unnaturally through the heavenly sphere where earth and sky meet. Here our daring and fortunate traveler marvels at wonders normally hidden

from mortal eyes, a cosmos filled with mysterious clouds, wheels, cogs and other astonishing and bewildering creations.

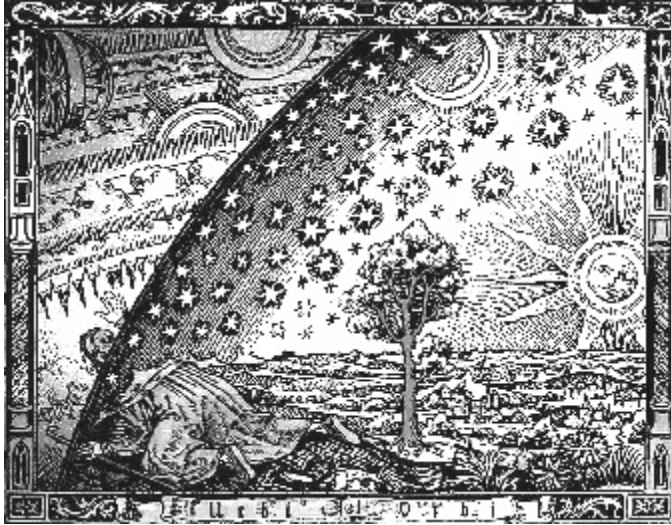


Figure 1. The mysterious, astronomical woodcut depicting a mortal viewing the glories of the heavens.

This apparently medieval illustration, revealing the workings of the heavens to mortal man, has fascinated people in modern times and can be found in many articles, books and advertisements. For example, W.H. Freeman and Company put a small black and white picture of the illustration in a *Sky & Telescope* advertisement back in September 1975 (p. 179). More recently, this artwork appeared as a colored, stunning picture on the cover of historian Daniel J. Boorstin's masterful history of

science, *The Discoverers: A History of Man's Search to Know His World and Himself*. Dr. Kerry V. Magruder of the University of Oklahoma notes another colorized version by Science Graphics (Tucson) is in a NASA publication called *Exobiology in Earth Orbit*. However, he writes that NASA got the date of origin wrong by including a caption that reads in part, "A famous early 20th century engraving (1911) . . ."

In fact, captions associated with this figure have varied over the years adding to its mystery and its apparent antiquity. For example, Ashbrook wrote that Donald H. Menzel printed the picture in his *Astronomy* (1971) with the description, "The medieval concept of the sky as a star-studded globe, through which a fortunate traveler might poke his head . . ." Ashbrook also noted that Lousi MacNeice's *Astrobiology* (1964) used the illustration with a caption that included the statement, "A 16th century German woodcut shows . . ." Ashbrook continued that the German historian Ernst Zinner wrote in 1957 that he was convinced the woodcut was probably engraved in the middle sixteenth century though no trace of the woodcut was known before 1906 when it appeared in a popular science book by W. Foerester.

These statements, of course, added fuel to the idea that the woodcut originated centuries ago. Indeed, Foerester's book added to the mystery of its origin by actually citing a reference for the woodcut, namely Camille Flammarion's famous *Astronomie Populaire* (1880). Why does this add to the mystery? Because Zinner looked at Flammarion's book and could not find the illustration!

The solution to the woodcut's origin, Ashbrook continues, seems to have begun with the independent work of Arthur Beer, a well-known Cambridge University astrophysicist and Bruno Weber, in charge of the Zurich Central Library's rare books. Beer found Flammarion

had published the illustration but in another book, his 1888 edition of *L'Atmosphère, Météorologie Populaire*. Later (1973) Weber, apparently unaware of Beer's solution, advanced the same solution.

The answer to who created the woodcut came with the realization that the woodcut was likely not medieval. As Ashbrook tells it, Weber comments that the illustration contains modern signs such as dotted hillside. This was a difficult technique for medieval craftsman who cut wood with knives but later became common with the introduction of sharp cutting tools as the burin introduced about 1800.

In fact, both Beer and Weber both suggested Flammarion himself created the woodcut, for he was known as a gifted artist who was originally apprenticed as an engraver and who created extremely reliable planetary drawings. Ashbrook writes that the plausibility for Flammarion's authorship of the woodcut is Flammarion's familiarity with a 1550 edition of Sebastian Münster's *Cosmographia*, a popular 16th century work. Indeed, Flammarion was an inquisitive reader since early age and owned a rich collection of old books including a rare edition of Ptolemy's historical *Almagest*.

Here, in Münster's book, the first illustration depicts a hilly landscape bathed by the Sun, Moon and enclosed by a star-studded sky reminiscent of the woodcut. So far so good. However, no pilgrim appears in Münster's drawing.

Still, Ashbrook says Weber points to a clue—Flammarion's own caption that reads, "A missionary of the middle ages has reached a place where the sky and the earth touch . . ." Flammarion evidently took the idea for this caption and the pilgrim from a well-known medieval legend that he must have been familiar with since he retells the legend in his own 1865 book, *Les Mondes Imaginaires*. This myth tells about how St. Marcus Romanus was one of few mortals who had traveled to beyond where earth meets sky!

Thus, our so-called medieval woodcut was created just over a century ago by a creative man, Camille Flammarion, who was himself inspired by the ideas of others. Regardless, the Flammarion woodcut, no matter what its age, remains one of the most thought provoking illustrations depicting humankind's spirit to explore and discover the mysteries of our cosmos.